CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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SECURITY INFORMATION

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1. Combines

a. As it is generally known the Soviet coal stripping machines, which were to have accelerated coal production in Hungary, have failed. Since the Hungarian coal industry is constantly plagued with demands of increased production, the Ministry of Mining and Power has instructed the research institutes to design a suitable coal stripping machine.

b. The end product of more than a year's experimentation was the F 4-type coal stripping combine, manufactured by the Vörös Csillag Traktorgyár (Red Star Tractor Factory). In the few mines where it was possible to operate the combine, it proved to have a very high performance capacity. However, its operating costs were so high that mine managers stopped using it on the first possible pretext to avoid argument with the inspectors from the National Planning Office over the sudden increase in production costs. Frequent breakage and rapid wear of parts contributed to the expense of operating the combine although these shortcomings were only partly the fault of the manufacturer. All in all the F 4 combine fell far short from expectations.

2. Hand Tools

a. At the same time, attempts were made to mechanize hand tools. Actual performance has proved the superiority of the Hungarian pneumatically driven tools over Soviet products. For this reason and also because of reasons of safety, Hungarian mining experts were opposed to the introduction of the electrically driven Soviet tools.

b. The following tools are being used in the Hungarian coal mines:

1) Pick hammers: The most widely used Hungarian pick hammers are the MFK - 9 series. They weigh only 9.5 kilograms, are pneumatically driven and operate

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at 5 atmospheres, delivering 1100 blows per minute. The Soviet pick hammers, on the other hand, all weigh between 12 - 15.5 kilograms and their performance is slower, ranging from between 700 - 900 blows per minute. Electrically driven, they require from .40 - .60 kilowatts of power. The prevailing practice of requiring higher production from the miners using the heavier, electrically-driven Soviet pick hammer with its inferior performance is both ridiculous and inhuman. At the decree of the Ministry of Mining, Hungarian engineers have also designed an electric pick hammer. It is driven by a 3-phase, 24-volt, 150-cycle, 0.9 horse power, short-circuit motor, with a speed of 8,700 revolutions per minute. To operate this hammer, however, special converters are required.

2) Hammer drills: Since electric hammer drills are completely incapable of competing with those that are pneumatically driven, the good, light-weight Hungarian MFK-18 drills are still in use. They weigh 17 kilograms, operate at a pressure of 5 atmospheres and deliver 1900 strokes per minute.

3) Coal drills: The Hungarian miners are obliged to use the Soviet-made electric coal drills. This is actually a retrogression, since the Hungarian, pneumatic, MBF-2 coal drills have a more than adequate record of performance in the Hungarian mines. The latter weigh 8.5 kilograms and are equipped with a 2-horsepower, lamellate, pneumatic motor which operates at a speed varying from 2800 to 400 revolutions per minute. The speed of the twist drill is reduced to 850 - 1400 revolutions per minute by a planetary gear.

4) Despite the fact that attempts to insulate the switches and wiring of all electrical equipment have been partially successful, the rough wear to which all equipment is subjected in the mines has made it impossible to devise a system of checking switches and wires which will guarantee perfect safety from sparks.

5) The Planning Office and the Ministry of Mining have instructed the recently established Institute of Mining Research to design hydraulically-driven equipment. This would give a far higher margin of safety from explosion than the electric tools.

3. In August 1952 F.M. Galadgi, Soviet mining engineer, arrived in Budapest for an extended stay in Hungary.